

A. SPECIFICATION AMENDMENTS

Please replace the paragraph starting at page 1, line 17 with the following paragraph:

Wireless telephones and personal digital assistants (PDAs) with web browsing capabilities are also well known in the art. These devices are generally known as hand held display devices (HHDDs). FIG. 1 is an example of a prior art webpage commonly viewed on an HHDD. One of the problems encountered with browsing the Internet with a HHDD web browser is that the display screen on a HHDD is much smaller than the display screen on a desktop or notebook computer. In order to display a whole web page on the smaller screen, the HHDDs generally shrink or reduce the web page down to a smaller resolution. Thus, the user sees a smaller version of the entire web page. However, reducing the size of the web page is problematic because the web page elements may become too small to read or understand. Therefore, a need exists in the art for a method of displaying web page elements at their intended resolution on an HHDD display screen.

Please replace the paragraph starting at page 4, line 6 with the following paragraph:

FIG. 1 is an example of a prior art webpage commonly viewed on a hand-held display device (HHDD);

FIG. 12 is an illustration of a computer network used to implement the present invention;

~~FIG. 2 is an illustration of a hand-held display device (HHDD) used to implement the present invention;~~

FIG. 3 is an illustration of a communications system used to implement the present invention;

FIG. 4 is an illustration of a HHDD used to implement the present invention;

FIG. 45 is an illustration of the memory used to implement the present invention;

FIG. 56 is an illustration of the logic of the Image Modification Program (IMP) of the present invention;

FIG. 67 is an illustration of the logic of the Navigation Program (NP) of the present invention;

FIG. 78 is an illustration of the logic of the Proxy Modification Program (PMP) of the present invention;

FIG. 89 is an illustration of the logic of the Proxy Navigation Program (PNP) of the present invention;

~~FIG. 9 is an example of an image downloadable over the Internet which may be altered by the present invention;~~

FIG. 10 is an example of the fragmented image produced by the present invention; and

FIG. 11 is an example of a web browser displaying an image produced by the present invention; and

FIG. 12 is illustration of a HHDD with a web browser displaying an image produced by the present invention.

Please replace the paragraph starting at page 5, line 22 with the following paragraph:

FIG. 42 is an illustration of computer network 80 associated with the present invention. Computer network 80 comprises local machine 85 electrically coupled to network 86. Local machine 85 is electrically coupled to remote machine 84 and remote machine 83 via network 86. Local machine 85 is also electrically coupled to server 81 and database 82 via network 86. Network 86 may be a simplified network connection such as a local area network (LAN) or may

be a larger network such as a wide area network (WAN) or the Internet. Furthermore, computer network 80 depicted in FIG. 4-2 is intended as a representation of a possible operating network that may contain the present invention and is not meant as an architectural limitation.

Please replace the paragraph starting at page 6, line 7 with the following paragraph:

FIG. 2-3 is an illustration of a communications network used to implement the present invention. Local machine 85, connected to network 86 may also be connected to transmitter/receiver 88. Transmitter/receiver 88 is capable of wireless communication with a plurality of devices, including hand held display device (HHDD) 90. HHDD 90 is capable of two-way communication with computer network 80, which may be the Internet, through transmitter/receiver 88 and local machine 85.

Please replace the paragraph starting at page 6, line 13 with the following paragraph:

FIG. 3-4 is an illustration of HHDD 90. HHDD 90 comprises display screen 92 and navigation buttons 94. When HHDD 90 is used to access the Internet, the user may view web pages on display screen 92 and enter data through a plurality of navigation buttons 94.

Please replace the paragraph starting at page 6, line 16 with the following paragraph:

The internal configuration of a computer, including connection and orientation of the processor, memory, and input/output devices, is well known in the art. The present invention is a methodology that can be embodied in a computer program. Referring to FIG. 4-5, the methodology of the present invention is implemented on software by Image Modification Program (IMPP) 200. IMP 200 includes Navigation Program (NP) 300, Proxy Modification

Program (PMP) 400, and Proxy Navigation Program (PNP) 500. IMP 200, NP 300, PMP 400, and PNP 500 described herein can be stored within the memory of any computer depicted in FIG. 42 or HHDD 90 depicted in FIGS. 23 and 34. Alternatively, IMP 200, NP 300, PMP 400, and PNP 500 can be stored in an external storage device such as a removable disk, a CD-ROM, or a USB storage device. Memory 100 is illustrative of the memory within one of the computers of FIGS. 42, 23 or 34. Memory 100 also contains web browser 102 and display screen data 104. The present invention may interface with web browser 102 and/or display screen data 104 through memory 100. As part of the present invention, the memory 100 can be configured with IMP 200, NP 300, PMP 400, and/or PNP 500. Processor 106 can execute the instructions contained in IMP 200, NP 300, PMP 400, and/or PNP 500.

Please replace the paragraph starting at page 7, line 13 with the following paragraph:

Turning to FIG. 56, the logic of Image Modification Program (IMP) 200 is illustrated. IMP 200 is a program that fragments images displayed on a HHDD and displays a portion of the original image at its intended resolution. IMP 200 starts (202) whenever the user opens a web browser application. Web browsers are well known in the art and examples of web browsers include Microsoft's Internet Explorer® and Netscape's Navigator®. When using a web browser, the user enters a desired web page uniform resource locator (URL) and IMP 200 follows the web browser to the desired web page (204). IMP 200 then analyzes the web page's hyper text markup language (HTML) and determines if the web page contains an image (206). For purposes of determining if an image is present, IMP 200 searches for files containing a .bmp, .jpg, or .gif file ending. Persons of ordinary skill in the art will be aware of other file endings for image files. If the web page does not contain any images, then IMP 200 displays the web page

without modification (210) and ends (224). If at step 206 IMP 200 determines that the web page contains an image, then IMP 200 proceeds to step 208.

Please replace the paragraph starting at page 8, line 3 with the following paragraph:

At step 208 IMP 200 determines if the image size is greater than the area on the display screen size of the HHDD which is allocated to display the image (208). IMP 200 can determine the size of the display screen from the display screen data 104 illustrated in FIG. 4-5. The area of the display screen which is allocated to display the image will depend on the layout of the web page and can be obtained from the web page HTML. IMP 200 can access the image size from the image data in the web page HTML. The image size is the intended resolution of the image. In comparing the image size to the display screen size, IMP 200 will determine that the image is larger than the display screen if either: the x-axis dimension of the image is larger than the x-axis dimension of the allocated space on the display screen, or the y-axis dimension of the image is larger than the y-axis dimension of the allocated space on the display screen. Because the HHDD displays the entire web page, the image size will almost always be larger than the allocated screen display area. In some embodiments, the area on the display screen allocated to display the image may be the entire display screen on the HHDD. If IMP 200 determines that the image size is not less than the allocated display screen size, then IMP 200 displays the web page without modification (210) and ends (224). If IMP 200 determines that the image size is larger than the allocated display screen size, then IMP 200 proceeds to step 212.

Please replace the paragraph starting at page 10, line 14 with the following paragraph:

Turning to FIG. 67, the logic of Navigation Program (NP) 300 is illustrated. NP 300 is a program that navigates the image fragmented by IMP 200. NP 300 starts (302) when prompted by IMP 200. NP 300 then makes a determination whether the user has pressed an up button (304). If the user has pressed the up button, NP 300 displays the fragment directly above the present fragment (306) and proceeds to step 308. If the user has not pressed the up button, then NP 300 proceeds to step 308 where NP 300 makes a determination whether the user has pressed the down button (308). If the user has pressed the down button, NP 300 displays the fragment directly below the present fragment (310) and proceeds to step 312. If the user has not pressed the down button, then NP 300 proceeds to step 312 where NP 300 makes a determination whether the user has pressed the left button (312). If the user has pressed the left button, NP 300 displays the fragment directly to the left of the present fragment (314) and proceeds to step 316. If the user has not pressed the left button, then NP 300 proceeds to step 316 where NP 300 makes a determination whether the user has pressed the right button (316). If the user has pressed the right button, NP 300 displays the fragment directly to the right of the present fragment (318) and ends (320). If the user has not pressed the right button, then NP 300 ends (320).

Please replace the paragraph starting at page 11, line 13 with the following paragraph:

Turning to FIG. 78, the logic of Proxy Modification Program (PMP) 400 is illustrated. PMP 400 is a program that fragments images displayed on a HHDD and displays a portion of the original image at its intended resolution, similar to PMP 200, but with the use of a proxy. PMP 400 operates on a proxy and automatically fragments the image for the HHDD. PMP 400 starts (402) whenever the user opens a web browser application. PMP 400 follows the web browser to the desired web page (404). PMP 400 accesses the web page (406) and analyzes the web page's

HTML and determines if the web page contains an image (408). For purposes of determining if an image is present, PMP 400 searches for files containing a .bmp, .jpg, or .gif file ending. Persons of ordinary skill in the art will be aware of other file endings for image files. If the web page does not contain any images, then PMP 400 displays the web page without modification (412) and ends (428). If at step 408 PMP 400 determines that the web page contains an image, then PMP 400 proceeds to step 410.

Please replace the paragraph starting at page 13, line 5 with the following paragraph:

PMP 400 then determines if the user wants to navigate the image (422). If the user wants to navigate the image, then PMP 400 runs PNP 500 on the HHDD (424). PNP 400 then sends the requested fragment to the HHDD (426) and returns to step 422. If at step 422 the user does not want to navigate the image, PMP 400 ends (~~424~~428).

Please replace the paragraph starting at page 13, line 9 with the following paragraph:

Turning to FIG. 89, the logic of Proxy Navigation Program (PNP) 500 is illustrated. PNP 500 is a program that navigates the image fragmented by IMP 200. PNP 500 starts (502) when prompted by PMP 400. PNP 500 then makes a determination whether the user has pressed an up button (504). If the user has pressed the up button, PNP 500 requests the fragment directly above the present fragment (506) and proceeds to step 508. If the user has not pressed the up button, then PNP 500 proceeds to step 508 where PNP 500 makes a determination whether the user has pressed the down button (508). If the user has pressed the down button, PNP 500 requests the fragment directly below the present fragment (510) and proceeds to step 512. If the user has not pressed the down button, then PNP 500 proceeds to step 512 where PNP 500 makes

a determination whether the user has pressed the left button (512). If the user has pressed the left button, PNP 500 requests the fragment directly to the left of the present fragment (514) and proceeds to step 516. If the user has not pressed the left button, then PNP 500 proceeds to step 516 where PNP 500 makes a determination whether the user has pressed the right button (516). If the user has pressed the right button, PNP 500 requests the fragment directly to the right of the present fragment (518) and ends (520). If the user has not pressed the right button, then PNP 500 ends (520).

Please replace the paragraph starting at page 14, line 1 with the following paragraph:

Turning to FIG. 9₁, an image from a web page is illustrated. The illustrated image is characteristic of the type of image that a HHDD user would want to access. The illustration contains a large amount of information displayed in great detail. When an image, such as the illustration in FIG. 9₁, is reduced to fit onto the smaller screen of a HHDD, much of the information on the image will be too small to be of any use to the user. Therefore, the present invention fragments the image using IMP 200 or PMP 400, as illustrated in FIG. 10. One of the numbered fragments may then be displayed on the HHDD such that the user can view a portion of the original image, but is able to discern all of the information that is readily discernable from the image because the image is displayed at the intended resolution. FIG. 11 is an illustration of a web browser utilizing the present invention. ~~FIG. 11~~ FIG. 12 is an illustration of a HHDD running a web browser utilizing the present invention. As can be seen in FIGS. 11 and 12, the web browser displays the reduced web page, but the reduced image has been replaced by the fifth (center) image fragment so that the user may view the image at the intended resolution.